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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/863,044	05/22/2001	Hidetoshi Ichioka	450100-03235	8346	
20999 7590 01/26/2007 FROMMER LAWRENCE & HAUG			EXAMINER		
745 FIFTH AV	ENUE- 10TH FL.		NGUYEN, H	NGUYEN, HUY THANH	
NEW YORK, NY 10151			ART UNIT	PAPER NUMBER	
			2621		
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS 01/26/2007		01/26/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)				
Office Action Summary		09/863,044	ICHIOKA ET AL.				
		Examiner	Art Unit				
		HUY T. NGUYEN	2621				
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover shee	t with the correspondence ac	Idress			
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS OF time may be available under the provisions of 37 CFR 1.1. SIX (6) MONTHS from the mailing date of this communication. It is period for reply is specified above, the maximum statutory period or reto reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMU 36(a). In no event, however, ma will apply and will expire SIX (6) , cause the application to becom	JNICATION.  By a reply be timely filed  MONTHS from the mailing date of this one ABANDONED (35 U.S.C. § 133).				
Status							
1)□	Responsive to communication(s) filed on						
•	This action is <b>FINAL</b> . 2b) This action is non-final.						
3)							
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Dispositi	on of Claims						
4)⊠	Claim(s) <u>1-17,19-44 and 46-54</u> is/are pending	in the application.					
·	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	Claim(s) is/are allowed.						
6)⊠	☑ Claim(s) <u>1-17,19-44 and 46-54</u> is/are rejected.						
7) 🗌	Claim(s) is/are objected to.						
8)[	Claim(s) are subject to restriction and/o	r election requirement.					
Applicati	ion Papers						
9)[	The specification is objected to by the Examine	er.					
10)	The drawing(s) filed on is/are: a) acc	epted or b)☐ objected	I to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority ι	under 35 U.S.C. § 119						
	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:		C. § 119(a)-(d) or (f).				
	1. Certified copies of the priority documents have been received.						
	<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>						
	<ol> <li>Copies of the certified copies of the prio application from the International Bureau</li> </ol>	•	een received in this National	Stage			
* 5	See the attached detailed Office action for a list		not received.				
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<b>A</b> 44	4(a)						
Attachmen	et(s) ce of References Cited (PTO-892)	4) 🗍 Intervi	ew Summary (PTO-413)				
	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper	No(s)/Mail Date				
3) Infor	mation Disclosure Statement(s) (PTO/SB/08)	· —	of Informal Patent Application				
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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-5,7-17 ,19-22,26-32, 34-44,46-49 and 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yagawa in view of Henmi (5,390027)..

Regarding claim 1, Yagawa discloses a system (Fig. 1) for recording and/or reproducing broadcasting programs received or programmed to be received, comprising:

program sorting means for sorting said broadcasting programs into categories according to a predetermined rule (column 3, lines 20-55;

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program recording means for recording said broadcasting programs or programming a recording schedule thereof;

virtual channel management means for assigning virtual channels every category, while setting said broadcasting programs, sorted into said categories, in array on an associated virtual channel in a reproduction start order (Fig. 13-16 column 13, line 25 to column 14, Abstract);

user operation means for accepting user-based channel select operation and/or program search operation on said virtual channels; and

program presentation means for taking out a corresponding broadcasting program for reproduction from a selected channel in response to user operations accepted through said user operation means (column 3, lines 20-55, column 9, lines 25-68, column 13, line 25 to column 14, line 14, Abstract, Figs. 13, 16-17).

Yagawa fails to teach wherein time base for display of each channel as recited in claim 1.

Henmi teaches a recording apparatus for recording programs of channels and means for selecting the recorded channel to be displayed and wherein the time base for each recorded channel advances independently (Fig. 7, column 13, line 25-47). Henmi teaches that each recorded channel can be selected for displaying and the selected channel is displayed on a monitor until the apparatus switch to other recorded channel in response to the user input.

It would have been obvious to one of ordinary skill in the art to modify Yagawa with Henmi by providing a selecting means as taught by Henmi with the apparatus

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of Yagawa for selecting the time base recoded virtual channel to the apparatus of Yagawa for displaying each virtual channel with a time base advancing as an alternative method for displaying the recorded virtual channel for viewing.

Regarding claim 2, Yagawa discloses the system for recording and/or reproducing broadcasting programs according to claim 1, wherein an entry of the categories of said virtual channels is made according to user profiles and/or user instructions (Fig. 13, column 9, lines 25-68).

Regarding claim 3, Yagawa discloses the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channels include a virtual channel for array of programs, which are not included in any category for the failure to set an associated

category by the user (Fig. 13, column 9, lines 25-68)...

Regarding claim 4 Yagawa discloses the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said program sorting means is to sort said broadcasting programs into categories according to EPG (Electronic Programming Guide) and/or user instructions ) (Fig. 13, column 9, lines 25-68) column 10, lines 4-25).

Regarding claim 5, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein the reproduction start order of the programs on the virtual channels is in conformity with a priority established in accordance with at least one of an on-the-air program order, user profiles and user

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Regarding claim 7, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said user operation means is to accept program search operations including pause, fast forward and rewind of reproduction positions on the virtual channels (Fig. 15).

Regarding claim 8, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said user operation means is to accept operations of specifying a broadcasting program preservative status, inclusively of deletion, preservation and reservation (for later watching) relating to specific programs on the virtual channels (column 8, lines 2-30, column 11, lines 40-65).

Regarding claim 9, Yagawa further teaches 9. A system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to manage the preservative status of the programs set in array on the virtual channels as well (column 13, lines 55-68).

Regarding claim 10, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to identify each program set in array on the virtual channels as one watched by the user or not (column 13, lines 50-65, column 14, lines 25-38.)

Regarding claim 11 , Yagawa further teaches a system for recording and/or reproducing

broadcasting programs according to claim 1, wherein said virtual channel management means is to locate the programs on the virtual channels according to a specified

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preservative status with respect to each of the recorded programs (column 13, lines 50 to column 14, line 10).

Regarding claim 12, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to locate a program, identified as one watched, in a period of a near past on a time base on the associated virtual channel (column 14, lines 25-38).

Regarding claim 13, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to locate a program, identified as one programmed to be deleted, in a period of a remote past on a time base on the associated virtual channel (column 14, lines 40-68).

Regarding claim 14, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said 10 virtual channel management means is to locate a program, identified as one preserved, in a period of a slightly remote past on a time base on the associated virtual channel (Fig. 15).

Regarding claim, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to locate a program, identified as one programmed to be recorded, in a period of a future (provided that a point on and after a broadcasting date is required) on a time base on the associated virtual channel (Fig. 15).

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Regarding claim 16, Yagawa further teaches the . A system for recording and/or reproducing broadcasting programs according to claim 1, wherein said 25 virtual channel management means is to locate a program, identified as one remaining recorded without being watched (reproduced) yet, in a period of a future spare time on the associated virtual channel (column 14, lines 30-38).

Regarding claim 17, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to locate a program, identified as one in process of reservation, in a period of a future spare time on the associated virtual channel preferentially (column 8, lines 20-30).

Regarding claim 19, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to display scheduling of programs on each virtual channel and a watching status and a preservative status of each program in a form of being identified at a glance (column 13, lines 50-68, column 14, lines 30-38).

Regarding claim 20, Yagawa further teaches the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means is to locate a series of programs on a same virtual channel continuously (Fig. 13).

Regarding claim 21, Yagawa further teaches 2 the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel

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management means is to shift a reproduction start position on the virtual channel in a process of being selected to a period of a future or a past on a time base in response to fast forward or rewind instructions supplied through said user operation means (Fig. 15, column 13, line 50 to column 14, line 15).

Regarding claim 22, Yagawa further teaches that the system for recording and/or reproducing broadcasting programs according to claim 1, wherein said virtual channel management means permits no fast forward operation for a program corresponding to one earlier than a broadcasting date since the fast forward operation is program is controlled by the user ..

Regarding claim 26, Yagawa teaches the system for recording and/or reproducing broadcasting programs according to claim 1, further comprising "To Watch list" management means for managing reproduction information or the like relating to programs paused on each virtual channel (column 13, lines 55-68).

Regarding claim 27, Yagawa teaches the system for recording and/or reproducing broadcasting programs according to claim 26, wherein said "To Watch list" management means is to display a list of paused programs for accepting the user selection on the list, and also to start reproduction of the corresponding recorded program in response to the user selection (column 13, lines 55-68).

Method claims 28-32,34-44,46-49 and 53-54 correspond to apparatus claims 1-5,7-17,19-22 and 26-27. Therefore method 28-32,34-44,46-49 and 53-54 are rejected by the same reason as applied to apparatus claims 1-5,7-17,19-22 and 26-27.

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3. Claim 6, 23-25,35 and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yagawa in view of Henmi et al. (5,390,027) as applied to claims 1-5,7-17,19-22,26-32, 34-44,46-49 and 53-54 above, further in view of Takagi et al. (5,999,691).

Regarding claim 23, Yagawa fails to teach wherein said virtual channel management means is to shift a reproduction start position on the virtual channel in a process of being selected to a period of a future or a past on a time base in response to fast forward or rewind instructions supplied through said user operation means, while setting a reproduction start position on the virtual channel in a process of being non-selected to follow the lapse of real time.

Takagi teaches apparatus for recording and reproducing a plurality of channels having a control means for controlling and selecting on air channels or recorded channels to be reproduced in a period of time defined by the user (column 13, lines 60 to column 15, line 65).

It would have bee obvious to one of ordinary skill in the art to modify Yagawa with Takagi by providing the apparatus of Yagawa with a control means as taught by Takagi for controlling and selecting a plurality of channel to be recorded and reproduced thereby enhancing the capacity of the apparatus of Yagawa in selecting a plurality of the channels to be reproduced.

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Regarding claims 6 and 24, Yagawa fails to teach reproducing the recorded program while presenting the on air channel by shifting reproduction position.

Takagi teaches an recording/ reproducing apparatus having means for reproducing the recorded program while presenting an on air broadcast program (column 8, lines 40-53). It would have been obvious to one of ordinary skill in the art to modify Yagawa with Takagi by using a control means as taught by Takagi with the apparatus of Yagawa thereby enhancing the capacity of the Yagawa apparatus to enable the apparatus of Yagawa for displaying the recorded program while being receiving the on air program.

Regarding claim 25, Yagawa as modified with Takagi further teaches the system for recording and/or reproducing broadcasting programs according to claim 24, wherein said user operation means is to accept a channel select operation requiring no distinction between the real channels and the virtual channels since the user can selecting a program being on air, recorded and reproduced.

Method claims 35 and 50-52 correspond to apparatus claims 6, 23-25. Therefore method claims 35 and 50-52 are rejected by the same reason as applied to apparatus claims 6 and 23-25.

## Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T. NGUYEN whose telephone number is (571) 272-7378. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

H.N

HUX MAYEN PRIMAFA EXAMINER